BY ORDER OF THE COMMANDER
SPANGDAHLEM AIR BASE (USAFE)

AIR FORCE MANUAL 11-2F-16

Volume 3

SPANGDAHLEM AIR BASE
Supplement

5 FEBRUARY 2025

Flying Operations

OPERATIONS PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at **www.e-publishing.af.mil** for downloading or ordering.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: 52 OG/OGV

Certified by: 52 FW/CC
(Col Kevin M. Crofton)

Supersedes: AFMAN 11-2F-16V3, SPANGDAHLEM AB SUP, 19 May 20

Pages: 20

Air Force Manual (AFMAN) 11-2F-16V3, *F-16 Operations Procedures*, 4 February 20, is supplemented as follows: This supplement established policies and procedures relating to F-16 operations for the 52d Operations Group (OG) and applies to all 52 OG units, and all 52 OG-gained units operating United States Air Forces in Europe (USAFE) owned, managed, and/or all controlled aircraft. The 52d Operations Group Commander (52 OG/CC) is the waiver authority for all items in this instruction. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF 847, *Recommendation for Change of Publication*; route AF 847s from the field through the appropriate functional's chain of command. The waiver authority for this publication is the 52 OG/CC.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include removing outdated/non-applicable guidance, reorganization in accordance with the parent instruction, and re-alignment with updated local procedures. Commanders and supervisors are

responsible for ensuring applicable personnel are familiar with and comply with the provisions of this publication.

8.1.1. **Introduction.** The following guidance supplements AFMAN 11-2F-16V3 to provide local directives for 52 OG pilots. All pilots assigned and attached to the 52 OG will comply with this instruction when operating 52 OG-assigned aircraft whether at home station or deployed. Deployed units will additionally adhere to applicable deployed unit directives. In the event of a conflict between this supplement and deployed unit directives, follow the most restrictive guidance.

8.1.2. **General Guidance**

8.1.2.1. Any deviations to this publication must be in the strictest interest of safety and reported to the flying squadron commander and the 52 OG/CC as soon as possible.

8.1.2.2. For a consolidated source of information on publications, weather, flight planning, and local area operations, reference the OGV SharePoint page at **https://usaf.dps.mil/sites/52og/OGV/default.aspx**. Access to this website is restricted, request permission through the SharePoint link or by contacting 52 OG/OGV (**52og.ogv@us.af.mil** or DSN 314-452-5977).

8.1.2.3. Standard Spangdahlem Air Base (AB) quiet hours are IAW Spangdahlem Air Base Instruction (SABI) 13-204, *Airfield Operations*. 52 OSS/OSOS coordinates local quiet hours for special events. The SOF will ensure all aircraft are complying with the quiet hour level and notify pilots when normal operations may be continued.

8.1.2.3.1. Night Considerations. Unless previously coordinated per SABI 13-204, 2200L is the end of normal Spangdahlem ATC operating hours and the beginning of Spangdahlem quiet hours.

8.1.2.4. Flight Call Signs. 52 OSS Airfield Management (OSAM) maintains a current list of approved flight call signs. These call signs are approved for use in the local area and for cross-country sorties. Work through OGV for any desired changes.

8.1.2.5. For fallout, pilots will coordinate flight re-numbering and call sign changes through the Operations Supervisor (Ops Sup). For late rejoins in the airspace, flights may revert to original numbering and call sign for the tactical portion of the sortie but will use the numbering and call sign at takeoff for all calls to Air Traffic Control (ATC) agencies.

8.1.2.6. Weather. Pilots may use the 52 OSS Weather Flight (OSW) Mission Execution Forecast (MEF) as a primary source of weather information for local sorties.

8.1.2.7. Environmental Restrictions to Flight Operations. Wind and Sea state restrictions are IAW AFMAN 11-2F16V3. Anti-exposure suit wear requirements are IAW AFMAN 11-301V2.

8.1.2.8. Aircrew Clothing and Equipment. In addition to the provisions of AFMAN 11-301V1, *Aircrew Flight Equipment (AFE)*: Life Preserver Units (LPUs) will be worn when any planned sustained flight is over water (i.e. crossing the English Channel, coastal airspace, or Vliehors Range), even if planning to remain within gliding distance of land. LPU wear is not required on local training missions when the designated alternate is across the English Channel (i.e. EGUL).

8.1.2.9. In-Flight Publications. Pilots must download the current versions of the following publications to their Electronic Flight Bags (EFBs) and carry them on all local flights. In the absence of MAJCOM or local guidance when on other than a local flight, use the following as a

guide and adjust EFB downloads accordingly. Physical copies of the following publication may be substituted.

8.1.2.9.1. Technical Order (T.O.) 1F-16CM-1CL-5

8.1.2.9.2. T.O. 1F-16CM-34-1-1CL-1

8.1.2.9.3. 52 FW In-Flight Guide (IFG)

8.1.2.9.4. Supplement Europe, North Africa, and Middle East (ENAME)

8.1.2.9.5. Flight Information Handbook (FIH)

8.1.2.9.6. Foreflight Downloads (Pilots may use Aero App for DOD Flight Information Publications (FLIP)):

8.1.2.9.6.1. ENAME DOD region and the following categories selected: Terminal Procedures, IFR Hight and Low charts.

8.1.2.9.6.2. Jeppesen coverage selected with the following countries selected: Belgium, France, Germany, Luxembourg, and The Netherlands.

8.1.2.10. Alternate Missions. Subject to the briefing and complexity requirements of AFMAN 11-2F-16V3, and single-ship restrictions in AFMAN 11-214, approved alternate missions include Instruments, Aircraft Handling Characteristics, Basic Fighter Maneuvers, Air Combat Maneuvers, Tactical Intercepts, Cruise Missile Defense, Unopposed Suppression of Enemy Air Defenses, and Airborne Interdiction.

8.1.2.11. Cross Country

8.1.2.11.1. Prior to filing a cross-country flight plan, it is incumbent on pilots to be familiar with diplomatic clearance requirements, airfield suitability, availability of instrument procedures, and other special instructions. The IFG contains information about off-station aircraft and cross-country servicing but should not be used as a single-source reference during mission planning. Contact 52 OG/OGV or the 52 OSS Current Operations Flight (OSO) with any questions.

8.1.2.11.2. Reference AFMAN 11-202V3 USAFE-AFAFRICASUP for information on weather requirements and FLIP applicability labeled as the “FLIP DECISION TREE”.

8.1.2.12. 480 FS/DOW is the OPR for unit flying standards.

8.1.2.13. Standard radio channelization is published in SABI 13-204 and the IFG.

8.1.2.14. Noise abatement is a high priority at Spangdahlem. All flights departing from or arriving to Spangdahlem will adhere to noise abatement procedures unless safety of flight or published procedures dictate otherwise. In addition to the restrictions in DoD FLIP AP/2, EUROPE-AFRICA-MIDDLE EAST, Germany Section, Terminal, Noise Abatement Procedures, Spangdahlem AB, and SABI 13-204, pilots will also adhere to the noise abatement restrictions in this publication.

8.1.3. **Ground Operations**

8.1.3.1. Preflight.

8.1.3.1.1. Pilots will inspect the Protective Aircraft Shelter (PAS), initial taxi routing, and immediate vicinity of the intake for foreign objects (FO), and possible obstructions to taxi and

flight control movements. Do not taxi if visible ice is present on the hardstand or along the taxi route.

8.1.3.1.2. Pilots will ensure all equipment in the PAS is positioned aft of the wing line or in a designated painted area (surrounded by a white line), PAS doors are in the fully opened position (indicated by the painted yellow lines on the ground), and exhaust doors are open.

8.1.3.1.3. During Thermal Stress "CAUTION", ground ops should be limited to 90 minutes with 30 minutes of air conditioning between flights. During "DANGER", ground ops should be limited to 45 minutes. "Ground ops" begin when leaving an air-conditioned facility and end with canopy down and the Environmental Control System (ECS) functioning properly. Sitting in an aircraft with a functioning ECS counts as an air-conditioned facility. During "EXTREME", ground ops should only be continued with OG/CC approval. A thermal stress chart is located in the 52FW IFG for reference. During off-station operations, local off-station guidance may be used. In the absence of off-station guidance, the chart in the DAFI 48-151 should be referenced.

8.1.3.2. Ice FOD Procedures.

8.1.3.2.1. 52 OSS/OSW determines if an icing potential exists and, if so, this information will be broadcast on the Automatic Terminal Information System (ATIS). Pilots should ensure the ground crews are aware that the potential for Ice FOD exists.

8.1.3.2.2. In addition to the provisions of AFMAN 11-2F-16V3:

8.1.3.2.2.1. The designated flight lead will taxi onto the hardstand after the Secondary Engine Control (SEC), Emergency Power Unit (EPU), Flight Control System (FLCS), and brake checks with the ANTI ICE switch ON.

8.1.3.2.2.2. Once on the hardstand, continue ground operations with the ground crew monitoring the intake for ice buildup.

8.1.3.2.2.3. 5 minutes after engine start the pilot will notify the Ops Sup if no icing is observed and continue ground operations.

8.1.3.2.2.4. If icing is observed, the pilot will shut down, notify the Ops Sup, SOF, and make a Code 3 write-up per **paragraph 8.1.3.2.5**.

8.1.3.2.3. F-16s will often get the INLET ICING caution light during times of cold weather. When ice accumulation is detected, the light should remain on for approximately 70 seconds, then turn off if no additional ice accumulation occurs (refer to T.O. 1F-16CM-1, *Flight Manual*, for a full description of normal operation). As long as there is no visible ice accumulation on the intake and the INLET ICING caution light does not remain on, continue normal operations. If the INLET ICING caution light stays on continuously (i.e. does not cycle) shut down the aircraft, notify the Ops Sup, and SOF.

8.1.3.2.4. When Ice FOD procedures are in effect, while stopped, intakes will be monitored for ice accumulation by at least one observer per two-ship. At night, the observer(s) must be equipped with a flashlight. If holding on a PAS hardstand, the ground crew will monitor the intake for ice accumulation.

8.1.3.2.5. Pilots will terminate ground operations and shut down the aircraft for visible ice in the intake. The aircraft will be Code 3, and pilots will make an entry in the forms stating that an intake inspection is required due to visible ice accumulation in the intake.

8.1.3.2.6. Hot pit on-deck positions will not be used when Ice FOD conditions exist.

8.1.3.3. Taxi Procedures.

8.1.3.3.1. Use minimum required power settings for taxi operations. Use IDLE power to the maximum extent possible during turns. Pilots will remain cognizant of nozzle placement when above IDLE.

8.1.3.3.2. Taxi out of the PAS on the yellow line and do not turn until the aircraft is completely clear of the PAS. When parking on the hardstand, direct exhaust away from the interior of the shelter, if possible.

8.1.3.3.3. Open Ramp Procedures.

8.1.3.3.3.1. Ramp 1, 2, and 4 taxi lines and equipment squares are painted for F-16 aircraft.

8.1.3.3.3.2. Ensure all equipment, covers, and other loose objects are secured in a maintenance toolbox or A-3 bag prior to engine start.

8.1.3.3.4. Pilots will check ATIS prior to departing the hardstand or open ramp. A high potential for a ground traffic conflict exists in the vicinity of the taxiway (TWY) C-P intersection due to aircraft taxiing to or from the Arm/De-Arm area. Additionally, a high potential for conflict exists in the vicinity of the intersections of TWY P with TWYs A, B, C, D, and E due to Arm/De-Arm traffic and aircraft exiting the runway. Pilots will monitor Ground frequency throughout taxi and ground operations.

8.1.3.3.5. Taxi Spacing. Pilots will taxi staggered with 150-foot spacing on TWY P, C, G, and the runway and will taxi on-centerline with 300’ spacing on all other taxiways.

8.1.3.3.6. Taxi Speed. Maximum taxi speed on TWY A, B, C, D, E, and F is 15 kts. Maximum taxi speed on TWY P, G, and the runway is 25 kts.

8.1.3.3.7. Jet Blast. Exercise extreme caution with regards to jet blast on Ramps 1, 2, and 4 due to the close proximity of buildings, personnel, and equipment.

8.1.3.3.8. When requesting taxi clearance, pilots will include their requested type of flight i.e. VFR, IFR, or V&I.

8.1.3.4. Arming/De-Arming.

8.1.3.4.1. Reference the IFG for the Arm/De-Arm Taxi Flow.

8.1.3.4.2. Contact Ground prior to exiting the arming area (example: “SPANGDAHLEM GROUND, SABER01, CONTINUE TAXI”).

8.1.3.4.3. If a reposition to the opposite side of the Arm/De-Arm area is desired, contact ground prior to repositioning (example: “SPANGDAHLEM GROUND, SABER01, REPOSITION ECHO PAD TO DELTA PAD.”).

8.1.3.5. Flight leads will ensure the Ops Sup is informed of changes to flight lineup and/or tail numbers. Ops Sup will ensure Patriot Excalibur (PEX) is updated and the SOF is notified.

8.1.3.6. While utilizing the hot pits, pilots will monitor Ground frequency. Each hot pit refueling area has its own unique considerations. Follow marshalling signals for hot pit alignment.

8.1.3.5. After Landing

8.1.3.5.1. All aircraft will obtain taxi clearance once clear of the runway and monitor ground during taxi-back.

8.1.3.5.2. Pilots will not taxi onto a hardstand without ground crew present.

8.1.4. **Flying Operations**

8.1.4.1. Takeoff and Departure Procedures

8.1.4.1.1. An intersection takeoff on Runway (RWY) 04 at TWY B provides 8,400 feet of runway available, and RWY 22 from TWY D provides 7,900 feet of runway available. Pilots may only perform intersection takeoffs with OG/CC approval. Pilots will not execute an intersection takeoff without first computing takeoff and landing data for the decreased distance.

8.1.4.1.2. Standard formation in Germany is defined as all flight members within 1 NM horizontally and 100 feet vertically of the squawking aircraft.

8.1.4.1.3. VFR departures will remain on Tower frequency until departing the Spangdahlem Control Zone (as defined in SABI 13-204). While airborne, pilots may contact a German Tactical Air Command and Control Service and/or Temporary Reserved Airspace (TRA) Monitor (TRAMON) to request traffic advisories and/or information.

8.1.4.1.4. VFR departure noise abatement:

8.1.4.1.4.1. When weather allows, tactical departures should be accomplished.

8.1.4.1.4.2. Once clear of the overhead pattern (if the VFR pattern is open), climb to a VFR hemispheric altitude above 3,700’ MSL as soon as possible for noise abatement.

8.1.4.1.4.3. On RWY 04, wingmen will not initiate turning rejoins until above 3,700’ MSL.

8.1.4.1.5. V&I (VFR and IFR) is defined locally in a Langen, Luxembourg, Spangdahlem letter of agreement, and is only used by Spangdahlem Tower, GCA, and Langen Air Control Center (ACC). V&I is intended to be used when a flight with a filed IFR flight plan would like to depart under VFR but may later want to activate the IFR portion of the flight plan. The departure portion of the flight plan will be cancelled, but the return portion of the flight plan should remain in the system. V&I should not be used to expedite departure knowing that VFR cloud clearances cannot be maintained for the route of flight. Additionally, V&I should not be used when planning to cross the German border due to the potential for flight plan complications and subsequent denial of border crossing.

8.1.4.1.6. Following a V&I departure, an IFR pickup with Spangdahlem GCA is possible if the flight can maintain VFR cloud clearances within Spangdahlem-GCA-controlled airspace (up to 5000’ mean sea level (MSL)) until an IFR clearance is issued. Otherwise, an IFR pickup can be accomplished with Langen.

8.1.4.1.7. Local Climb out. In addition to SABI 13-204 procedures, on RWY 22 and VMC, extend to avoid the towns of Dudeldorf and Gondorf for noise abatement.

8.1.4.1.8. For trail departures, normal spacing is 2-3 NM.

8.1.4.2. Weather Considerations.

8.1.4.2.1. Weather at Spangdahlem can change rapidly without notice and pilots must closely monitor field status and fuel state. Pilots should not rely solely on ATIS for weather information.

Contact the SOF when the weather is questionable and/or rapidly changing to get the most current information.

8.1.4.2.2. The SQ/CC will certify pilots whom he deems qualified for PWC A per AFMAN 11-202V3 USAFE-AFAFRICASUP Attachment 10 and will designate PWC A on the Letter of Qualifications. PWC B minimums will still be used to determine the weather status for training sorties. The SOF will notify the 52 OG/CC if PWC A pilots were required to fly below PWC B minimums to land and annotate this on the SOF Report.

8.1.4.2.2. The OG/CC may waive MR pilots down to published approach minimums during daylight hours on a case-by-case basis IAW AFMAN 11-202V3 USAFE-AFAFRICASUP paragraph A10.2.1.

8.1.4.2.3. There is often a weather phenomenon (valley effect) at the approach end of RWY 22 causing the conditions on final to be lower than the prevailing airfield conditions. Strict adherence to PWC minimums is always required. Pilots should submit a pilot report (PIREP) after landing to include the ceiling and visibility when weather conditions are at or near PWC minimums or lower than reported by ATIS.

8.1.4.2.4. If icing is encountered in flight, pilots will coordinate with ATC for a new altitude and pass a PIREP to the SOF, directly or through ATC, so they can coordinate with GCA to keep other aircraft out of icing conditions. A continuous INLET ICING caution light encountered in flight (lasting longer than approximately 70 seconds), or greater than light ice accumulation is experienced, the aircraft will be Code 3 on landing (reference the write-up verbiage in paragraph

8.1.4.2.5. A cycling INLET ICING caution light, or trace to light ice accumulation, does not require an aircraft to be Code 3. If there is any doubt, Code 3 the aircraft.

8.1.4.3. Arrival Procedures.

8.1.4.3.1. Normal recovery fuel is not locally modified from AFMAN 11-2F-16V3. Alternate fuel requirements are per AFMAN 11-202V3. Divert fuel calculations and assumptions are published in the IFG. Pilots should consider weather, number of aircraft airborne, status of nearby airfields, and hot pit operations and may elect to increase recovery fuel if the situation dictates. Reference **paragraph 8.1.6.13** for emergency divert information.

8.1.4.3.2. When the 52 FW status is “VFR” pilots will arrive with enough fuel to divert to the SOF designated divert base and land with at least min fuel (i.e. F-16 Block 50 = 1000lbs). Recommended fuels are listed in the IFG.

8.1.4.3.3. When the 52 FW status is “IFR” or when AFMAN 11-202v3 requires designating an alternate, pilots will arrive with enough fuel to shoot the approach, divert, and land at the SOF designated divert base with normal recovery fuel on initial or the Final Approach Fix, depending on the weather.

8.1.4.3.4. When the field status is VFR but a VFR recovery is not possible (e.g. the ceiling is below the MVA but greater than or equal to 2000’), pilots will increase recovery fuel for an approach at Spangdahlem. In these cases, ATIS would report VFR, SOF directs IFR recoveries.

8.1.4.3.5. VFR Arrival.

8.1.4.3.5.1. For VFR arrivals to Spangdahlem from TRA 205, pilots should use TRA controlling agency as well as scanning for IFF Mode 3/C returns for a "picture" of local traffic to include Hahn Airport departures and recoveries.

8.1.4.3.5.2. Primary VFR Arrival Points.

8.1.4.3.5.2.1. RWY 22. ALPHA or LAKE to initial, tactical initial, or visual straight-in.

8.1.4.3.5.2.2. RWY 04. BRAVO to initial, tactical initial, or visual straight-in.

8.1.4.3.5.3. VFR arrival noise abatement:

8.1.4.3.5.3.1. Do not over-fly the town of Spangdahlem for tactical initial overhead patterns.

8.1.4.3.5.3.2. For RWY 22, a Tower-directed "Departure End Break" for the overhead pattern or "Extend Upwind" for low/missed approaches does not alleviate the pilot's responsibility to adhere to VFR departure noise abatement procedures i.e. flying a 210-degree heading.

8.1.4.3.5.3.3. When weather allows, high tactical recoveries should be used.

8.1.4.3.5.4. Simulated Flameout (SFO) pattern procedures.

8.1.4.3.5.4.1. SFO (both climbs and descents) patterns will be flown SE of the field.

8.1.4.3.5.4.2. Remain within 3 NM of the runway and to aid in deconfliction, aircraft climbing maintain 1.5-3 NM and aircraft descending maintain ≤ 1 NM from the runway.

8.1.4.3.5.4.3. Report "high key", "low key", and "base key, gear down". Additionally, pilots will report "10 NM straight in SFO" and "4 NM, gear down" for straight in SFOs.

8.1.4.3.5.4.4. Altitudes will be FL080-095 for high key or 10 NM straight in, 4,200ft MSL-FL065 for low key or 5 NM straight in.

8.1.4.3.5.4.5. Random entry SFO patterns may start from any position Southeast of Spangdahlem and will be requested via the phraseology: "Callsign, request direct low/base key".

8.1.4.3.5.4.6. Additional SFO information can be found in the SABI 13-204.

8.1.4.3.5.5. SFO Touch-and-Gos

8.1.4.3.5.5.1. Pilots will not accomplish SFO touch-and-gos until completing the SFO Touch-and-Go Training Program maintained by 480 FS/DOT.

8.1.4.3.5.5.2. Will be executed only at Spangdahlem AB on a dry runway with a departure-end cable. Crosswind component must be 10 kts or less.

8.1.4.3.5.5.3. Approved configurations are standard clean or 1-tank training configuration (2 AIM-120s, 2 AIM-9s, MRLs, HTS Pod, and empty 300gal centerline tank if equipped).

8.1.4.3.5.5.4. The maximum fuel weight is 4,000 lbs (3,000 lbs for D-models). The centerline fuel tank must be empty if equipped.

8.1.4.3.5.5.5. Discontinue the SFO touch-and-go if unable to obtain a wings level attitude on final by 200 ft AGL or if unable to establish a normal glide path by 100 ft AGL.

8.1.4.3.5.5.6. Touchdown must occur at 11-13 degrees AOA in the first third of the runway (not after the 7,000 ft remaining marker). If unable, execute a go-around, using afterburner if required, to prevent touchdown.

8.1.4.3.5.5.7. IAW SABI 13-204, full runway separation is needed for a touch-and-go following a full-stop aircraft.

8.1.4.3.5.5.8. To limit tire wear, one touch-and-go per sortie may be accomplished.

8.1.4.3.6. IFR Arrival.

8.1.4.3.6.1. For radar trail recoveries, in addition to the procedures outlined in SABI 13-204, all flight members will decelerate simultaneously on lead's calls to maintain spacing. Flight leads will slow to 250 knots indicated airspeed (KIAS) when entering the radar traffic pattern or 20 DME from the field (whichever occurs first), slow to 180 KIAS and configure before the final approach fix (FAF), and slow to final approach speed by 3 nautical mile (NM) final. Do not use S-turns to gain spacing. If, at any time spacing is in question, the wingman will notify lead and either execute the missed approach procedure, or, if VFR, break out of the pattern IAW local procedures and notify the ATC controller. In the event of multiple aircraft executing a missed approach out of radar trail, each aircraft must coordinate with ATC for their own clearance or a flight rejoin.

8.1.4.3.6.2. The maximum number of aircraft in a radar trail recovery is four.

8.1.4.3.6.3. For trail recoveries, normal spacing is 2-3 NM.

8.1.4.3.7. Heads-Up Display (HUD) out Practice.

8.1.4.3.7.1. The HUD will be on and dimmed so as not to display visual symbology, but still available if required.

8.1.4.3.7.2. Weather minimums are one weather category above the pilot's pilot weather category (PWC), but no lower than Category C.

8.1.4.3.7.3. Practice No-HUD landings will only be accomplished during daylight hours.

8.1.4.3.8. Hazards.

8.1.4.3.8.1. For approaches to RWY 04, there are three obstructions on approach a pilot must pay particular attention to, one of which is in the overrun: a localizer antenna (1,093 feet prior to the runway threshold and 7 feet below threshold elevation), a far field monitor (FFM) (1,093 feet prior to the runway threshold and 7 feet below threshold elevation) and a near field monitor (in the overrun, 660 feet prior to the runway threshold, and 3 feet below threshold elevation).

8.1.4.3.8.2. For approaches to RWY 22, there are two obstructions on approach a pilot must pay special attention to, particularly because they are above the threshold elevation: the localizer antenna (1,186 feet prior to the runway threshold and 9 feet above threshold elevation) and a FFM (1,186 feet prior to the runway threshold and 10 feet above threshold elevation).

8.1.4.3.8.3. Visual Illusions.

8.1.4.3.8.3.1. The terrain surrounding Spangdahlem, a sloped runway, and a lack of lighting references surrounding the airfield at night ("black hole" effect) lead to visual illusions causing pilots to think they are steeper or shallower than reality. Pilots must use all tools (Instrument Landing System (ILS) glidepath, PAPIs, HUD) at their disposal to assist in arriving on the proper glidepath for the approach and landing. It is imperative that pilots do not rely solely on a visual sight picture to set up a final approach and must diligently crosscheck aircraft instruments with visual references to prevent flying a steeper- or shallower-than-normal approach.

8.1.4.3.8.3.2. RWY 22. Rising terrain on the approach end of RWY 22 coupled with a 0.7% down-slope gives the illusion of being on a shallower glide path than desired. The natural pilot tendency is to increase altitude in an attempt to "make the picture look right". This results in being on a steeper-than-normal glide path.

8.1.4.3.8.3.3. RWY 04. The large valley on approach to RWY 04 coupled with a 0.7% up-slope gives the illusion of being on a steeper glide path than desired. The natural pilot tendency is to reduce altitude in an attempt to "make the picture look right". This results in a shallower glide path than normal and being "drug-in". Also, when transitioning from RWY 22 (the primary runway) to RWY 04, there is a risk for pilots to feel comfortable with a "drug-in" approach because the terrain leading to RWY 22 is higher than that leading to RWY 04.

8.1.4.3.8.3.4. The sequenced flashing lights (usually the first lights seen after exiting the weather) run directly into the 1,000-foot roll bar and stop there, which may enhance the illusion of the 1,000-foot roll bar appearing to be the threshold. These sequenced flashing lights can also give the false impression of flat terrain prior to the runway. In reality the sequenced flashers are mounted on poles

8.1.4.4. Landing.

8.1.4.4.1. If planning to exit at TWY C, advise Tower prior to turning off. Pilots will not turn off at TWY C with aircraft landing in trail of them i.e. in the same formation. Early turnoffs at TWY D (RWY 04) or at TWY B (RWY 22) do not require Tower approval.

8.1.4.4.2. If braking action is other than expected and/or reported, pass runway braking action to Tower using the braking action descriptions in the Flight Information Handbook (FIH).

8.1.4.5. Airspace Procedures.

8.1.4.5.1. The boundaries of German special use areas are defined in German Military Flight Information Publication Aeronautical Maps and Charts, and DoD FLIP AP/2A, EUROPE-AFRICA-MIDDLE EAST.

8.1.4.5.2. In addition to the provisions of the German Military Aeronautical Information Publication (Mil AIP), pilots will adhere to the following guidance for TRA operations:

8.1.4.5.2.1. IFR Entry. Remain IFR until reaching visual meteorological conditions (VMC). Upon reaching VMC, report VMC to the controlling agency, and contact TRAMON when directed.

8.1.4.5.2.2. VFR Entry. Contact the controlling agency for clearance into the TRA and don't climb above FL095 until instructed to do so or given clearance to operate in the TRA.

8.1.4.5.2.3. Flights must maintain VMC in the TRA if the controlling agency is TRAMON. IFR operations are allowed with tactical control.

8.1.4.5.2.4. Within a TRA, participating aircraft are not separated from each other by the controlling agency. Flight leads will ensure deconfliction (vertical, lateral, or both) is maintained between participating flights when TRA airspace is shared.

8.1.4.5.2.5. Use caution during operations in TRAs for aircraft transiting the area. The controlling agencies will allow IFR traffic to transit the area and hospital flight, even if the TRA is scheduled and active. Without prior coordination of a new floor, ceiling, or lateral boundary, a TRA "knock-

it-off" will be initiated anytime a non-player inside the working area infringes a 10 NM bubble around any 52 FW aircraft (regardless of altitude, aspect, or heading).

8.1.4.5.2.6. Unlimited maneuvering will only be flown within a TRA or equivalent restricted/reserved area.

8.1.4.5.2.7. TRA Exit. Pilots will notify the controlling agency when they are 5 minutes from exiting and whether they will exit VFR or IFR then coordinate with the controlling agency when they are "ready to RTB VFR/IFR" and receive clearance for exit prior to crossing the vertical or lateral boundaries of a TRA.

8.1.4.5.2.8. IFR Exit. Pilots will ensure they are on an IFR clearance (i.e. have heard "IFR starts now" from ATC) before transiting weather when exiting the TRA. GCI does not have the authority to provide clearance out of a restricted area, but, if requested, can coordinate for and pass an ATC clearance. If planning a flight split for recovery from TRA 205, flight leads will coordinate for the split prior to departing TRA 205 or delay the split until in radio contact with Spangdahlem GCA.

8.1.4.5.2.9. VFR Exit. Descend with TRAMON approval within the lateral confines while maintaining VMC. German ATC does not provide traffic deconfliction for VFR traffic in Class E airspace (such as below TRA 205) and is not required to provide traffic advisories. Therefore, while transiting Class E airspace VFR for an extended time, pilots should utilize GCI to the maximum extent possible for traffic advisories. If GCI is not available, pilots may request Radar Assisted Flight Information Service (RAFIS) from ATC.

8.1.4.5.3. Opportunity air refueling is authorized, if briefed.

8.1.4.5.4. Electronic Countermeasure (ECM) pods with training programs are authorized for use anywhere in Germany. Training missions flown with a combat program loaded will leave the pod in standby.

8.1.4.6. Local Area

8.1.4.6.1. Pilots must maintain increased vigilance when approaching Frankfurt-Hahn (EDFH) to avoid both potential conflicts and Hahn's Class D airspace.

8.1.4.6.1.1. Hahn's airspace should be referenced in FLIP for the most current dimensions.

8.1.4.6.1.1.1. Hahn's Class D is approximately defined as a corridor ±3 NM of runway centerline out to 6 NM from SFC-FL065, 6-9 NM from 2,500 ft-FL065, and 9-13 NM from 3,500 ft-FL065.

8.1.4.6.1.1.2. Hahn is surrounded by a Transponder Mandatory Zone (TMZ) outside of and above the Class D up to FL075. When transiting the TMZ pilots will monitor 125.6 and squawk 0424.

8.1.4.6.2. VFR Tactical Training

8.1.4.6.2.1. VFR tactical training is not allowed within 15 NM of Spangdahlem AB. Additionally, pilots should avoid direct overflight of all towns within 15 NM of Spangdahlem AB to the maximum extent possible.

8.1.4.6.3. VFR Avoidance Areas.

8.1.4.6.3.1. Avoid the following by 5,000 ft MSL and/or 2 NM:

8.1.4.6.3.1.1. The town of Kell (N 49 38.0, E 006 49.5), under TRA 205A.

8.1.4.6.3.1.2. The city of Bitburg (N 49 58.056, E 006 31.555).

8.1.4.6.3.1.3. The town of Lebach (N 49 24.6, E 006 54.7), under TRA 205D.

8.1.4.6.3.1.4. The town of Namborn (N 49 31.3, E 007 08.5), under TRA 205D.

8.1.4.6.3.1.5. The town of St. Wendel (N 49 28.0, E 007 09.9), under TRA 205D.

8.1.4.6.3.2. Avoid the following by 3,700 ft MSL and/or 2 NM:

8.1.4.6.3.2.1. The city of Wittlich (N 49 59.093, E 006 53.325). Additionally, remain well clear of the Wittlich hospital (approximately 1 NM north of the town).

8.1.4.6.3.2.2. The city of Trier (N 49 45.450, E 006 39.040), under TRA 205A.

8.1.4.6.3.2.3. Trier-Föhren Airport (N 49 51.707, E 006 47.462), under TRA 205A. Weekdays after 1700L, and on weekends and German holidays, the parachute zone at Trier-Fohren Airport extends to FL100 and may be NOTAM'd higher.

8.1.4.6.3.2.4. The town of Nattenheim (N 50 01.2, E 006 31.1).

8.1.4.6.3.3. Avoid Bitburg Airfield (N 49 56.662, E 006 33.796) by 2,500 ft MSL and/or 2 NM.

8.1.4.6.4. Mid-Air Collision Avoidance (MACA). Reference SABI 91-213, *52d Fighter Wing Mir-Air Collision Avoidance (MACA) Plan*. Additionally, pilots must be vigilant in clearing for light civilian, glider, paraglider, and jumper traffic. Pilots will inform the controlling agency and/or SOF, if any VFR hazards are present, and will use all available means to avoid traffic conflicts. Additionally, exercise extreme care near, the following areas:

8.1.4.6.6.1. The Mosel and Rhine River valleys.

8.1.4.6.6.2. The Daun Glider port (N 50 10.5, E 06 52.0), approximately 14NM northeast of Spangdahlem or 2 NM southeast of the city of Daun.

8.1.4.6.6.3. The Ramstein holding pattern (as depicted in FLIP (Terminal) High and Low Altitude ENAME Volume 3) and radar pattern (predominately north of the airfield).

8.1.4.6.5. Low Altitude Flight Operations (defined in German Mil AIP as below 1,500 ft above ground level (AGL)). Pilots will reference the restrictions and procedures for flying low level in the German Mil AIP before the flight and use the following guidance when planning and flying at low altitude outside reserved airspace:

8.1.4.6.5.1. Low altitude operations will be spread out as much as possible. If the forecast weather allows, pilots will plan to go to areas other than those below TRA 205.

8.1.4.6.5.2. VFR flights at low altitude will maintain contact with a GCI agency to the maximum extent possible for traffic advisories. If GCI is not available, pilots should request RAFIS from ATC.

8.1.4.6.6. Bird Aircraft Strike Hazard (BASH) Procedures are IAW SABI 91-212, *52d Fighter Wing Bird/Wildlife Aircraft Strike Hazard (BASH) Plan* and Table 8.1..

8.1.4.6.6.1. 52 FW/SEF will identify times of BASH Phase II and notify the Ops Sup and the SOF. The Ops Sup will include BASH Phase II in the step brief during times of Phase II.

8.1.4.6.6.2. During periods of BASH Phase II, Bird Watch Condition Moderate will be the baseline Bird Watch Condition ±1 hour of sunrise and sunset.

Table 8.1. Bird Watch Conditions.

Bird Watch Condition	Restrictions
Severe (BIRDTAM 6-8)	No takeoffs or landings Hold and/or divert as able No low level flying below 2,000’ in hazard area
Moderate (BIRDTAM 3-5)	Restricted low approach (300ft AGL) or full stop landing only Initial limited to 2-ship maximum No formation takeoffs or landings Adjust overhead pattern to avoid bird activity
Low (BIRDTAM 0-2)	No bird watch condition declared Normal operations

8.1.4.7. Automatic Ground Collision Avoidance System (AGCAS).

8.1.4.7.1. AGCAS will remain in NORM for all training sorties unless AGCAS is acting abnormally.

8.1.4.7.2. Functioning AGCAS is required for Basic Fighter Maneuvers (not including 3k sets) and any other high-G (7 Gs or greater) maneuvering, tactical maneuvering or flying visual formation at night, tactical maneuvering below 5,000ft AGL, and fighting in IMC.

8.1.5. **Weapons Employment**

8.1.5.1. Range Procedures. There are numerous air-to-ground ranges around Europe. Flight leads will ensure all flight members are familiar with current range regulations and employment restrictions before flying to any range. The IFG should not be used as a single-source reference during mission planning.

8.1.5.2. Off-Range Procedures. Reference AM 75-2-1 (for Allied Command Operations), host nation AIPs, AFMAN 11-214, *Air Operations Rules and Procedures*, AFMAN 11-2F-16V3, and **paragraph 8.1.4.6.2.1**.

8.1.6. **Abnormal Procedures**

8.1.6.1. Emergencies. The SOF should be contacted and advised of the situation and your plan when conditions permit.

8.1.6.1.1. During an In-Flight Emergency (IFE), pilots may request single frequency approach (SFA) to reduce workload. In the event the emergency occurs within Spangdahlem-GCA-controlled airspace, contact can be made with GCA directly on SFA to declare the emergency and obtain an IFR clearance (if necessary). After ATC transfers SFA to the Fire Chief, the Fire Chief has on-scene command. Pilots must coordinate with the Fire Chief for termination of the IFE.

8.1.6.1.2. The SOF will initiate a Conference Hotel if the situation dictates.

8.1.6.2. Search and Rescue. In general, when operating in the local area, plan BINGO fuel to return to Spangdahlem AB. Reference the Search and Rescue Checklist in the IFG.

8.1.6.3. Diverts.

8.1.6.3.1. Time and conditions permitting, the SOF will coordinate all diverts. Flights should contact the SOF with their divert intentions and fuel remaining at least 5 minutes prior to reaching

divert fuel. If required, the SOF will assist in sequencing diverting aircraft among available divert/alternate airfields. Contact with or approval from the SOF is not required for pilots to execute a timely divert to the declared alternate.

8.1.6.3.2. Aircraft will divert with mutual support to the maximum extent possible. Inform the SOF if diverting with a hot gun, chaff, flares, or carted ordnance (live or training). SOFs will notify the divert base. After landing, notify Ground if you require de-arm and wait for Transient Alert or munitions personnel.

8.1.6.3.3. After landing, contact Spangdahlem Command Post and Squadron Operations.

8.1.6.4. Barrier Engagement.

8.1.6.4.1. Information on alternate base barrier configuration and compatibility can be found in DoD FLIP En-Route Supplement ENAME and the IFG, pilots should familiarize themselves with this information during mission planning. However, if in doubt about barrier configuration or compatibility in flight, contact the base's Tower with landing speed and gross weight to ensure compatibility. Some bases, especially in Turkey, set barriers for lighter, slower engagement criteria and will need to adjust barrier settings. Additionally, some bases have less than optimal run-out available, potentially reducing maximum engagement limits.

8.1.6.4.2. Textile Brake Arresting Gear. Most USAF textile arresting systems are being installed as a replacement for overrun systems. These systems can be identified by the nomenclature "MB" in the NOTAMs or IFR Supplement. Current systems at USAF fields are identified as MB60.9.9 and MB100.10C.

8.1.6.4.2.1. Original test data on textile brake aircraft arresting systems indicates that aircraft engaging these systems may incur higher G-loading during arrestment, structural loads exceeding aircraft hook limits, and/or excessive rollback after arrest. There is potential for more than 2 Gs at arrestment, which may occur at any engagement speed.

8.1.6.4.3. Barrier Certification. Reference the IFG and AFMAN 11-2F-16V3 for barrier certification procedures.

8.1.6.4.3.1. For a home-station barrier certification, all coordination will be conducted on SFA. The pilot will inform the Fire Chief if able to taxi post-engagement. If comm out, a thumbs-up response from the pilot indicates the aircraft can be taxied. The Fire Chief will then be directive on shutdown or taxi-out.

8.1.6.4.3.2. If unable to taxi, expect to shut down and be towed clear. If the Fire Chief allows taxi back, the aircraft will be chocked while the cable is disconnected from the ribbon and pulled free of the aircraft hook. Crash Recovery will inform the pilot when the hook is clear of the cable. Ensure the hook is raised prior to taxiing.

8.1.6.4.3.3. The pilot will note aircraft gross weight and cable engagement speed.

8.1.6.5. Hot Brakes. Hot Brake locations are IAW SABI 13-204 and are depicted in the IFG.

8.1.6.5.1. If hot brakes are suspected, inform Ground and taxi to the nearest suitable hot brake location.

8.1.6.5.2. If hot brakes are discovered during de-arm, inform Ground and avoid further taxiing. All other aircraft in the de-arm area will evacuate the area. Once Crash Recovery has responded, expect to shut down (provided the aircraft is on a level surface) IAW T.O. guidance. Once the

aircraft is shut down and a tire is chocked, Crash Recovery will determine the condition of the brakes. If signaled to ground egress, egress the aircraft to an area at least 300 ft away.

8.1.6.5.3. If hot brakes are suspected or discovered upon arrival at the PAS, park the aircraft on the hardstand, declare an emergency and proceed with T.O. guidance once Crash Recovery has arrived.

8.1.6.5.4. If hot brakes are suspected or discovered upon arrival at any Hot Pits, declare an emergency and proceed to a SOF-directed location. Proceed with T.O. guidance once Crash Recovery has arrived.

8.1.6.6. Taxi Clear Conditions. Aircraft will not continue taxiing, but may clear the runway after landing with the following known or suspected conditions:

8.1.6.6.1. Oil gauge/pressure switch failure (i.e. without a LUBE LOW Pilot Fault List or HYD/OIL PRESS warning light).

8.1.6.6.2. Engine operating in SEC.

8.1.6.6.3. Single / dual generator failure (for dual generator failure, verify normal braking, then taxi to a designated EPU area).

8.1.6.6.4. Battery failure / FLCS RLY light that doesn't reset (verify normal braking, then taxi to a designated EPU area).

8.1.6.6.5. Physiological incident including Oxygen System Malfunctions and Rapid Decompression. If hypoxia symptoms were present or suspected, pilots will use judgement in determining their ability to safely taxi clear. If in doubt, stop straight ahead on the runway.

8.1.6.7. No Taxi Conditions. Aircraft will not continue taxiing or clear the runway after landing with the following known or suspected conditions:

8.1.6.7.1. Fire.

8.1.6.7.2. Nose wheel steering malfunction/failure.

8.1.6.7.3. Brake malfunction/failure.

8.1.6.7.4. Unsafe gear indication.

8.1.6.7.5. Bottomed landing gear strut.

8.1.6.7.6. Blown tire.

8.1.6.7.7. Oil system malfunction (other than the situation described above).

8.1.6.7.8. B-system hydraulic failure.

8.1.6.7.9. Engine malfunction (other than the situation described above).

8.1.6.8. Impoundment Conditions (Ref. DAFI 21-101). Pilots will remain with the aircraft and prevent any maintenance and/or servicing while waiting for Quality Assurance for any of the following conditions (if this occurs while cross country and/or at an out base, make an entry in the forms stating "no maintenance and/or servicing to be performed on aircraft"):

8.1.6.8.1. Aircraft mishap as defined in AFI 91-204 and AFMAN 91-223, Aviation Safety Investigations and Reports.

8.1.6.8.2. Un-commanded flight control movement or lack of control movement after command input.

8.1.6.8.3. Inadvertent release or explosive mishap.

8.1.6.8.4. Aircraft engine anomalies including flameout/stagnation, engine case penetrations, ruptures, or burn-through from an internal engine component, loss of thrust sufficient to prevent maintaining level flight at a safe altitude, damage due to a foreign object and source of FO is determined to be internal to the engine.

8.1.6.8.5. In-flight fire.

8.1.6.8.6. In-flight loss of all pitot-static system instruments or all gyro stabilized attitude or direction indicators.

8.1.6.8.7. Physiological incidents attributable to aircraft systems.

8.1.6.9. Jettison procedures are IAW SABI 13-204 with the following highlights:

8.1.6.9.1. The primary impact point is Baumholder Range, target 1 (N4938.490, E00724.486, 1594ft MSL). SPA radial 125, 34 NM.

8.1.6.9.2. Jettison above maximum fragmentation altitude up to 6600ft MSL.

8.1.6.9.3. Langen ATC will coordinate for transfer to Baumholder Range.

8.1.6.10. Bailout procedures are IAW SABI 13-204 with the following highlights:

8.1.6.10.1. Utilize the same point as a controlled jettison.

8.1.6.10.2. If able, set throttle to idle before ejecting.

8.1.6.12. EPU/Hydrazine Procedures. Activated EPU/Hydrazine locations are IAW SABI 13-204 and are depicted in the IFG. Pilots will proceed to these locations if the EPU has been activated, the EPU Run light illuminates, or a decrease in EPU fuel quantity is discovered.

8.1.6.13. Emergency Diverts.

8.1.6.13.1. Büchel AB (ETSB) is the closest suitable landing surface and can be a good emergency option, particularly in low fuel situations. However, pilots must keep in mind that Büchel AB has different operating hours than Spangdahlem AB and may not be open. SOFs will remain aware of the Büchel AB field status.

8.1.6.13.2. Frankfurt-Hahn (EDFH) and Luxembourg (ELLX) are the nearest non-military, suitable emergency diverts. Both have a control tower and ILS approaches published in FLIP but are not TACAN-equipped (distance measuring equipment (DME)-only). Additionally, Saarbrücken (EDDR) and Zweibrücken (EDRZ), along the southern border of TRA 205, offer the same facilities.

8.1.6.14. Unsafe Gun/Hung Ordnance procedures. The primary unsafe gun/hung ordnance area is the de-arm area for the respective active runway.

8.1.6.14.1. Unsafe Gun. Safe all switches, declare an emergency, and fly a straight-in approach. After landing, taxi to the normal de-arm area (if available). If the gun did not fire and the stores management system did not count down, have the gun pin installed and taxi back normally. If the gun jammed or fired inadvertently, shut down in the de-arm area.

8.1.6.14.2. Hung Ordnance. Secure ordnance is defined as: ordnance parallel to the station and/or suspension equipment and clearly positioned against the sway braces. Ordnance will be assumed unsecure if the status of the store cannot be visually confirmed. Rockets are assumed secure unless a portion of the rocket has extended from the front of the LAU, or the foil on the back of the rocket is bulging. Pilots may attempt additional release of a possible hung secure rocket. If remaining stores present a hazard, attempt a single jettison pass using a computed release point if able. Jettison training ordnance from a 1000 ft AGL level pass at 350 KIAS maximum. Jettison live ordnance from a 3000 ft AGL level pass with a climbing recovery.

8.1.6.14.2.1. Hung Unsecure (Live or Training). Declare an emergency and divert to the nearest suitable military field avoiding populated areas. Fly a straight-in approach. If not landing at Spangdahlem AB, ensure Tower is informed of the situation and request instructions after landing.

8.1.6.14.2.2. Hung Live Secure. Declare an emergency and return to base avoiding populated areas. Fly a straight-in approach to the active runway and de-arm in the normal location. Live ordnance includes white phosphorous (WP) and high explosive (HE) rockets.

8.1.6.15.2.3. Hung Training Secure. For BDU-33s, continue with normal weapons delivery. If unable to release subsequent BDU-33s from a single TER / SUU, de-select that station and continue with the range sortie. Otherwise, return to base avoiding populated areas. Fly a straight-in approach and de-arm in the normal location. Training ordnance includes target practice (TP) rockets.

KEVIN M. CROFTON, Col, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFMAN 11-202V3 USAFE-AFAFRICASUP, *Flight Operations*, 18 July 2022

AFMAN 11-301V1, *Aircrew Flight Equipment (AFE)*, 31 May 2023

AFMAN 11-301V2, *Management and Configuration Requirements for Aircrew Flight Equipment (AFE)*, 1 December 2023

DAFI 21-101, *Aircraft and Equipment Maintenance Management*, 20 December 2023

DAFI 48-151, *Thermal Stress Program*, 2 May 2022

German Military Aeronautical Information Publication

LoA between Langen ACC and Luxembourg APP and Spangdahlem TWR/APP, 10 July 2021

SABI 13-204, *Airfield Operations*, 6 June 2023

SABI 91-212, 52D Fighter Wing Bird/Wildlife Aircraft Strike Hazard (BASH), 17 June 2019

SABI 91-213, *52D Fighter Wing Mid-Air Collision Avoidance (MACA) Plan*, 9 June 2021

T.O. 1F-16CM-1, *Flight Manual*, 15 June 2023

Abbreviations and Acronyms

AFE—Aircrew Flight Equipment

BASH—Bird/Wildlife Aircraft Strike Hazard

BIRDTAM—Bird NOTAM

EFB—Electronic Flight Bag

ENAME—Europe, North Africa, And Middle East

FCF—Functional Check Flight

FOD—Foreign Object Debris

FW—Fighter Wing

IFG—In-Flight Guide

LoA—Letter of Agreement

LPU—Life Preserver Unit

MACA—Mid-Air Collision Avoidance

MEF—Mission Execution Forecast

OCF—Operational Check Flight

OG—Operations Group

Ops Sup—Operations Supervisor

OSAM—OSS Airfield Management

OSOS—OSS Current Operations

OSS—Operational Support Squadron

OSW—OSS Weather Flight

PAS—Protective Aircraft Shelter

SABI—Spangdahlem Air Base Instruction

TRA—Temporary Reserved Airspace

TRAMON—TRA Monitor

V&I—VFR and IFR

Attachment 2

FUNCTIONAL CHECK FLIGHT (FCF)

A2.1. In addition to the guidance in AFMAN 11-2F-16V1, all 52 OG FCF pilots will accomplish, at a minimum, FCF ground training, FCF simulator, and a FCF checkout flight. Exception: Those individuals who were previously FCF certified in the same MDS can accomplish an abbreviated upgrade program with 52 OG/CC approval.

A2.2. The FCF upgrade will include two sorties. The first flight will be in the rear cockpit of a D-Model with a FCF certified pilot in the front cockpit. The second flight will be in a D-model with a FCF-certified pilot in the rear cockpit and the upgrade pilot will fly and full FCF profile. Upgrade flights will not be in aircraft requiring an FCF or operational check.

A2.3. FCFs will be flown with a clean aircraft to the max extent possible. At a minimum, the aircraft needs to be a 9G capable configuration with nothing mounted on station 5L or 5R.

A2.4. For D-models, the rear seat will not be occupied during actual FCFs.

A2.5. 52 **OG/CC (or equivalent) approval is required if FCFs are to be conducted with weather below 8,000 ft ceiling and 8,000 m visibility and will not be conducted when weather is lower than 4,000 ft ceiling and 5,000 m visibility.**

A2.6. FCFs will only be accomplished between the hours of sunrise and sunset.

A2.7. OCF flights will be flown by an experienced Combat Mission Ready/Basic Mission Capable (CMR/BMC) pilot. OCF flights may be flown in conjunction with other missions and varied weather conditions as long as the Ops Sup and pilot in command determine that the issue requiring the OCF flight does not interfere with safe operations.

A2.8. In the event of a check-out that requires the aircraft to run at higher-than-normal taxi speeds but not fly, only experienced CMR/BMC pilots will be used, and the checkout will be accomplished on a runway.

A2.9. Higher than normal taxi speed is defined as operations above 30 knots straight ahead, 10 knots turning, or other technical order guidance, whichever is slower.